**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ PER. \_\_\_\_**

**BIO-COM - ECOLOGY –**

**ENERGY TRANSFER, NEEDS, RELATIONSHIPS & ESTUARIES – STUDY GUIDE**

1. When an organism’s life processes slows down during times when there is little food, this is called \_\_\_\_\_\_\_\_\_\_\_.

2. The most important need of an organism is \_\_\_\_\_.

3. The area claimed by an animal or group of animals as their living space is its \_\_\_\_.

4. The role an organisms plays in its environment is its \_\_\_\_\_.

5. The base of all food webs on the planet are \_\_\_\_.

6. Identify what an herbivore might eat.

7. Identify 4 carnivores?

8. Raccoons will eat almost anything. They are most accurately called \_\_\_.

9. Condors are related to vultures and feed on carrion, or dead animals. Condors’ role in

the food web is as \_\_\_\_

10. \_\_\_\_ are the different feeding levels in an ecosystem.

11. A semi-enclosed body of water with a direction connection to the ocean and where sea water is diluted with freshwater from the land is the definition of a(n) \_\_\_\_.

12. An estuary found on the gentle slopes of the continental shelf is a \_\_\_\_.

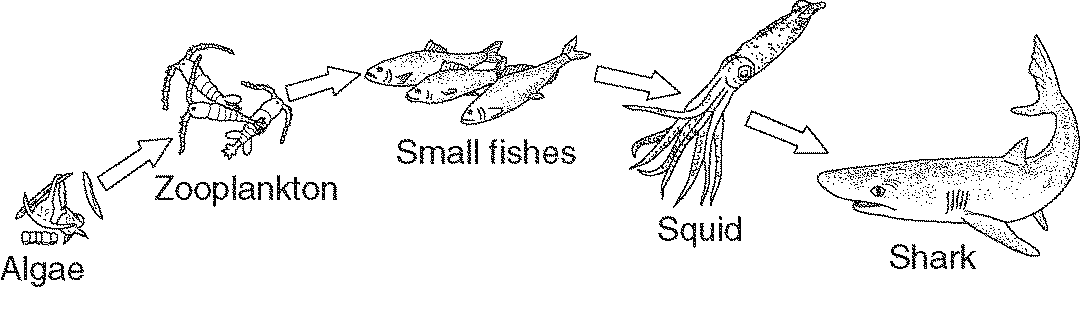
13. San Francisco Bay is an example of a \_\_\_\_ estuary.

14. Estuaries without beaches and were made due to glacial activity are \_\_\_.

15. Estuaries serve as nurseries to \_\_\_ of the recreational fish.

16. Which organisms make their food through photosynthesis?

17. Evaporation of water from plants is called \_\_\_\_\_.

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**Figure 3-1**

18. The algae at the beginning of the food chain in Figure 3-1 are \_\_\_\_.

19. Organisms that obtain nutrients by breaking down dead and decaying plants and animals are called \_\_\_.

20. A snake that eats a frog that has eaten an insect that fed on a plant is a \_\_\_.

21. The repeated movement of water between Earth’s surface and the atmosphere is called\_\_\_\_.

22. Identify 3 ways in which carbon cycles through the biosphere.

23. Nitrogen fixation is carried out primarily by \_\_\_.

24. What organisms are directly involved in the nitrogen cycle?

25. Organisms need nutrients in order to \_\_\_\_.

26. \_\_\_\_\_ populations control predator populations.

27. A parasite does not live inside its \_\_\_.

28. An example of \_\_\_\_\_\_\_\_\_\_ is a whale & barnacles.

29. An example of \_\_\_ is a tick & dog.

30. An example of a \_\_\_\_ is a hare.

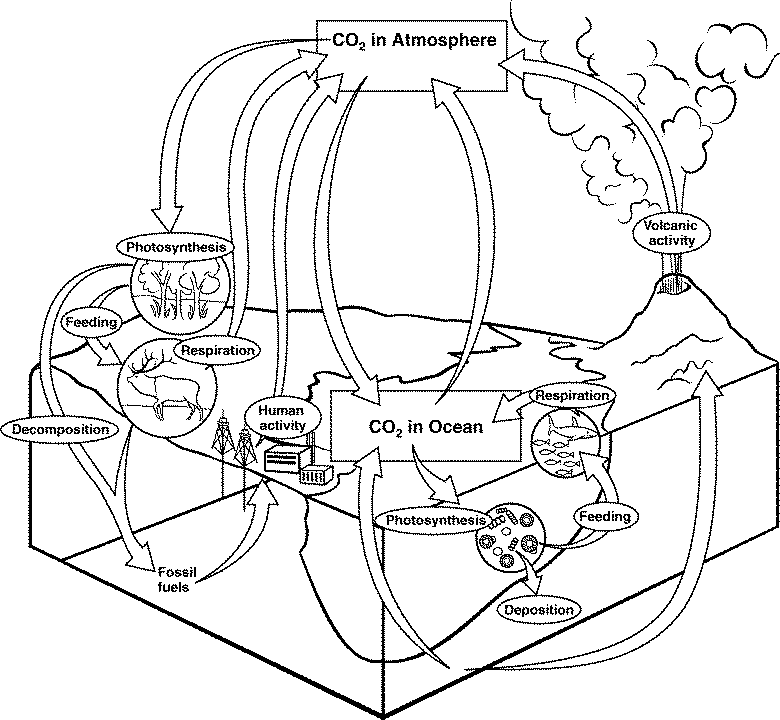
31. An organism which actively hunts and consumes other organisms is a \_\_\_\_.

32. An organism which is consumed by another organism is a \_\_\_\_.

33. A relationship in which one organism benefits and the other organism is harmed is \_\_\_.

40. A relationship in which one organism benefits and the other organism is neither harmed nor benefited is \_\_\_\_.

41. A relationship in which both organisms benefit is \_\_\_\_.

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**D.**

**E.**

**F.**

**G,.**

**C.**

**B.**

**A.**

**H.**

42. Which steps in the figure above shows the removal of CO2 from the atmosphere.

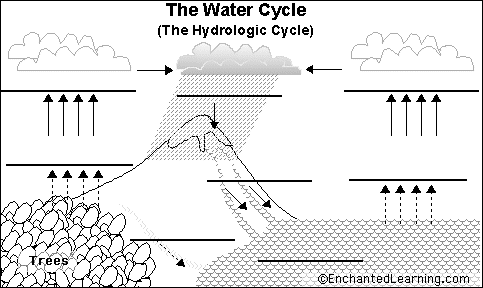
43. Which steps in the figure above shows the addition of CO2 to the atmosphere?

44. Which step in the figure above shows the process where green plants use sunlight to make carbohydrates and oxygen?

45. Which step in the figure above shows the process where by animals use oxygen and carbohydrates to make carbon dioxide and water?

46. Which step above shows a biogeochemical process?

**Label the diagram below**

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**50.**

**53.**

**51.**

**52.**

**54.**

**49.**

**47.**

**48.**

47. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 51. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

48. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 52. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

49. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 53. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

50. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 54. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_